



UNIVERSITY OF
FLORIDA

IFAS EXTENSION

Friday's Feature

By

Theresa Friday

July 15, 2006

Chinch bugs are not always a cinch to control

The dry, hot weather is causing some major problems in our lawns. While many dry spots are directly related to the lack of rain, one indirect effect of prolonged drought stress is an increase in southern chinch bug infestations. If any area of your St. Augustine lawn is beginning to yellow and die, be on the look out for chinch bugs.

The southern chinch bug is the most damaging insect pest of St. Augustinegrass. While this pest may occasionally attack other turfgrasses and weeds, St. Augustinegrass is its primary host.

Chinch bugs are very small. Adults are only about 1/8 of an inch long and are gray-black to dark chestnut-brown. Their wings are white but have a black spot in the middle, making it look like they have a white "X" on their backs. The immatures, or nymphs, vary in color and markings. Very young nymphs are bright orange with a cream colored band across the abdomen. Nymphs darken as they mature.

Chinch bugs have needle-like mouthparts and feed by inserting their slender beak into the grass and sucking the plant juices. As the chinch bug sucks the plant juices, it releases a toxin that causes yellowish to brownish patches in the lawn. The damaged area resembles drought injury-- the grass yellows, then dries and becomes straw-like.



Chinch bug nymphs (left) vary in color and markings. The chinch bug adult (right) is gray-black with white wings.

This pest is a sunshine-loving insect and seldom attacks grass in densely shady areas. Areas of the lawn that are drier and are in open sunlight several hours daily may be "hot spots" for chinch bugs. Damage is most likely to occur first in droughty areas, especially near sidewalks and driveways.

Other factors, such as disease, nutritional imbalances and lack of water can cause off-color areas in lawns. Therefore, you should carefully examine your St. Augustinegrass to determine if a discolored area is a sign of a chinch bug infestation.

There are several quick tests to check for chinch bugs. First, try parting the grass with your hands to see if any chinch bugs are walking around. Another method utilizes a large, empty coffee can. Simply remove the remaining end of a coffee can so that you have a cylinder. Sink the bottom lip of the can into the soil where the healthy and damaged grass meets. Fill the can with plain water a few times until water stands in the cylinder. Within a few minutes, chinch bugs in the area of grass encased by the cylinder will begin floating to the surface. Another, less labor-intensive option is to use a Dust Buster or hand-held vacuum cleaner to suck up any chinch bugs near damaged areas. Remove the filter, dump the contents on the sidewalk, and look for nymphs and adults.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. U.S. Department of Agriculture, Cooperative Extension Service, University of Florida, IFAS, Florida A. & M. University Cooperative Extension Program, and Boards of County Commissioners Cooperating.

So, what do you do if you have a chinch bug infestation? Before grabbing an insecticide, be aware that the chinch bug is known for its ability to develop resistance to pesticides. Insecticide resistance in the southern chinch bug was first noted in 1953. There is documented evidence that some populations were even resistant to DDT.

Cultural practices including proper mowing, fertilization, and irrigation can greatly reduce the susceptibility of St. Augustinegrass to chinch bug infestations. Avoid applying too much fertilizer. Chinch bugs love over-fertilized grass.

St. Augustinegrass should be kept to a height of three to four inches to ensure a strong root system, which will increase the grass tolerance against chinch bug infestations. Lawns should be mowed frequently enough so that no more than one-third of the leaf blade is removed at each mowing. Furthermore, mowing with a sharpened blade will reduce the stress on the grass, thus making the lawn less susceptible to chinch bug outbreaks

If chemical control is warranted, products containing bifenthrin, cyfluthrin, lambda-cyhalothrin or permethrin are available for homeowner use. Be sure to read and follow all label directions. Since most insecticides do not kill the eggs, repeated applications may be needed to gain control.

Theresa Friday is the Residential Horticulture Extension Agent for Santa Rosa County. The use of trade names, if used in this article, is solely for the purpose of providing specific information. It is not a guarantee, warranty, or endorsement of the product name(s) and does not signify that they are approved to the exclusion of others. For additional information about all of the county extension services and other articles of interest go to: <http://www.santarosa.fl.gov/extension>